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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,335	07/05/2006	Urs Bauer	AP10741	9126
7590		08/09/2007		
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			EXAMINER	
			PECHE, JORGE O	
			ART UNIT	PAPER NUMBER
			3661	
			MAIL DATE	DELIVERY MODE
			08/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/564,335

Applicant(s)

BAUER, URS

Examiner

Jorge O. Peche

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) 2, 3 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/11/2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because:

- Figures 1-5 are not readable.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims **1, 5, 6, 9, and 10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "partial value," "actual value," "theoretical total value," "sum of the theoretical partial value," "one parameter," "the value," and "a divergence" in claims **1, 5, 6, 9, and 10** respectively are a relative terms, which renders the claim indefinite. The above terms are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant should disclose "partial value," "actual value," "theoretical total value," "sum of the theoretical partial value," "one parameter," "the value," and "a divergence" to clearly set fourth the definition explicitly and with reasonable clarity, deliberateness and precision (see page 2-7; page 11-12). The claims must have clear support so the meanings of the term in the claims are ascertainable to one skilled in the art by reference to the rest of the specification

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims **1, 4-7, and 9-10** are rejected under 35 U.S.C. 102(e) as being unpatentable over Hackl *et al.* (**Patent No.: 6,085,860**).

**This rejection is presented in the best understanding of the claim limitations and in light of the specification.**

Regarding **claim 1**, Hackl discloses a method and apparatus for operating a steering system for a motor vehicle comprising the step of:

- Determining a total motion (actual value of a control variable) set by a positioning control (32/53) and motor (33/54) (actuator) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).
- The positioning control (32) and motor (33) generate the total motion in accordance to a suitable desired value (theoretical value) (block 51, Figure 5) (see col. 4, lines 37-48; Figure 5).

- The total motion (actual value of a control variable) is characterized in an added angle (partial angle) of a total motion (actual value) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).
- The total motion (actual value) is set in accordance with a vehicle speed, steering wheel angle, and other variable (theoretical partial value) consisting in the sum of steering wheel angle and added angle (a sum of theoretical partial values), in dependence on the vehicle speed and steering wheel angle (theoretical partial value) corresponding to the added angle (the partial value) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).
- The positioning control (32/53) and motor (33/54) (actuator model) is connected to a yaw rate controller (52) which is formed with an amplification factor (K1) (one parameter) whereby the suitable desired value (the value) is determined by the integration of the difference between a desired value (theoretical total value) and yaw rate (total value) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).

Regarding **claim 4**, Hackl discloses a method for determining the suitable desired value (the value) of the amplification factor (K1) by a control and regulation strategy of a steering system (actuator model) as the added angle (partial angle) of a total motion (actual value) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).

Regarding **claims 5-7**, Hackl discloses a method for determining the suitable desired value (the value) of the amplification factor (K1) if the rate of change between

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the desired value and yaw rate is greater than zero and/or the rate of change of time is greater than zero (see col. 4, lines 37-67; col. 5, lines 1-63; col. 6, lines 1-30; Figures 5-6). The suitable desired value (the value) would be retained if the rate of change of time is greater than zero and/ the value of the suitable desired value is different than zero (below or above zero; limited to a present interval).

Regarding **claim 9**, Hackl discloses a method for determining vehicle speed, steering wheel angle, and possibly other variables (assessed value) for a desired value (actual partial value) of an added angle (steering angles) set by a positioning control (32/53) and motor (33/54) (actuator/ superimposition steering) (see col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).

Regarding **claim 10**, Hackl discloses a method for determining vehicle speed, steering wheel angle, and possibly other variables (assessed value) for a desired value (actual partial value) of an added angle (steering angles) set by a positioning control (32/53) and motor (33/54) (actuator/ superimposition steering) of a steering mechanism transmission ratio (see col. 1, lines 5-35; col. 3, lines 46-66; col. 4, lines 1-12; col. 4, lines 37-48; Figures 1-3, and 5).

### ***Allowable Subject Matter***

Claims **2-3** and **8** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge O. Peche whose telephone number is 571-270-1339. The examiner can normally be reached on 8:30 am - 5:30 pm Monday to Friday.

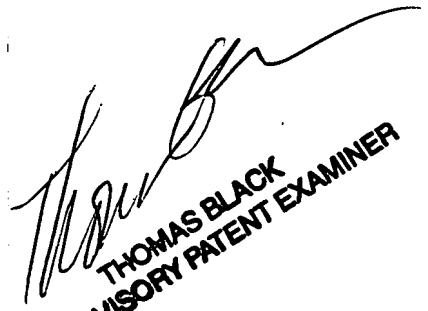
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jorge O. Peche

Patent Examiner  
Art Unit 3661  
August 2, 2007



THOMAS BLACK  
SUPERVISORY PATENT EXAMINER